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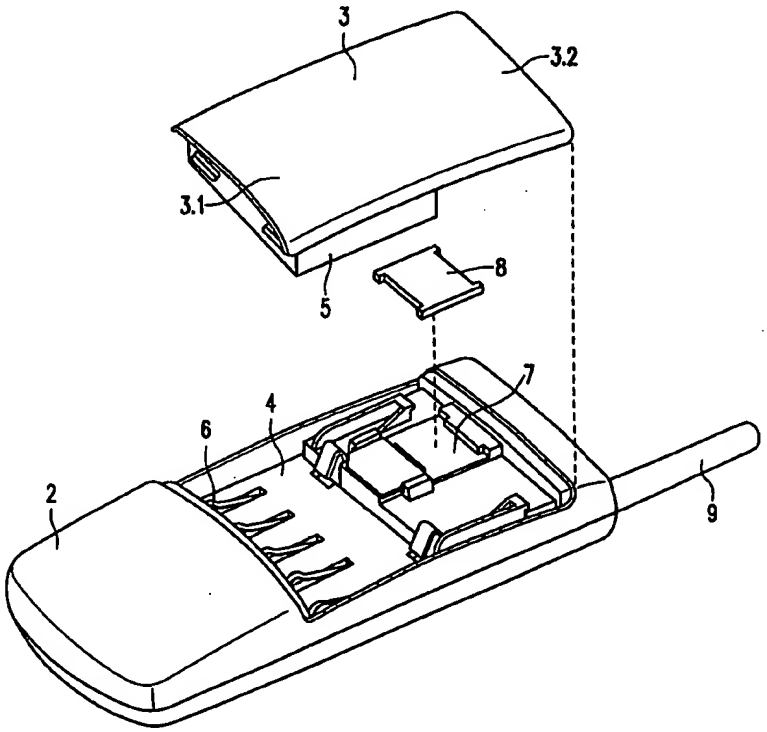
(57) Abstract

A mobile telephone comprises a housing which includes a battery compartment closable by a cover, for accommodating a battery connected to battery contacts of the telephone and further includes a SIMM card compartment closable by a cover for accommodating a SIMM card. The cover of the battery compartment and the cover of the SIMM card compartment are combined to a single combination cover.



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Mobile telephone

Description

The invention relates to a mobile telephone with a housing that includes a battery compartment closable by a cover, for accommodating a battery connected to battery contacts of the telephone and further includes a SIMM card compartment closable by a cover for accommodating a SIMM card.

Telephones of the above type have increasingly been used, for example, as handsets for telephony via a cellular mobile telephone network such as the NMT or GSM network. It goes without saying that requirements to be made on such telephones are, for example, light weight, small size, low price and ease of handling.

The telephone is to comprise a rechargeable or not battery to provide the energy supply. Furthermore, a so-called SIMM card is to be present (SIMM = Single Inline Memory Module) on which the telephone subscriber's subscription data are stored, data about the telephone number of the respective telephone, etc. Both the battery and the SIMM card are to be exchangeable. Therefore, it is customary to accommodate both a battery and the SIMM card in the housing of the telephone in compartments meant for this purpose, a battery compartment and a SIMM card compartment, respectively. These compartments influence the dimensions of the telephone while the covers of the battery compartment and of the SIMM card compartment are separate removable parts enhancing the complexity of the telephone with, furthermore, the extra possibility of loss.

It is an object of the invention to provide a telephone of the type defined in the opening paragraph having a simple and light construction and is characterized in that the cover of the battery compartment and the cover of the SIMM card compartment are combined to a single combination cover. The application of a combination cover provides the advantage that in lieu of two separate covers, only a single cover is necessary. In addition, the battery compartment and the SIMM card compartment may be combined as desired, so that no partition wall is necessary between the two compartments, which leads to a simplification of the construction of the telephone and to less use of material.

Preferably, an embodiment of the invention is used which is characterized in that the battery can be attached to the combination cover and in that the contact of the

battery with the battery contacts of the telephone is broken when the combination cover with the battery attached is removed from the housing of the telephone. By applying this embodiment, the electrical connection between the battery and the further parts of the telephone is certainly broken when the combination cover is removed before access to the SIMM card is obtained. In many cases it is important that the telephone be currentless before the SIMM card is manipulated, so that any problems are avoided of undefined connection voltages in the system which could lead to loss of information of the SIMM card.

A following embodiment which is important for small dimensions of the combination cover is characterized in that the combination cover is substantially T-shaped in elevation, the cross of the T covering the battery compartment and the leg of the T covering the SIMM card compartment.

These and other aspects of the invention will be apparent from and elucidated with reference to the embodiments described hereinafter.

In the drawings:

Fig. 1 shows a perspective view of the rear of a diagrammatically shown mobile telephone,

Fig. 2 shows the mobile telephone of Fig. 1 once more, but now with a removed combination cover with battery and a removed SIMM card in exploded view,

Fig. 3 is a rear view similar to that of Fig. 1 of another embodiment of the invention, and

Fig. 4 is a view similar to that of Fig. 2 of the telephone shown in Fig. 3, but with the battery omitted.

The telephone 1 of Figs. 1 and 2 comprises an antenna 9 and a housing 2 which includes a battery compartment 4 closable by a cover 3, for accommodating a battery 5 connected to the battery contacts 6 of the telephone, and further comprising a SIMM card compartment 7 also closable by a cover 3, for accommodating the SIMM card 8. The cover of the battery compartment 4 and the cover of the SIMM card compartment 7 are combined to a single combination cover 3. As shown in Fig. 2, the battery 5 is attached to the combination cover in a manner not shown, but known per se. When the combination cover 3 with the battery 5 attached is removed from the housing 2 of the telephone 1, the contact of the battery with the battery contacts 6 of the telephone is broken. Once the combination cover with battery 5 is removed, the device has become currentless, so that the SIMM card 8

can be manipulated in the SIMM card compartment 7 without the risk of data loss as a result of still available undefined connection voltages.

The combination cover 3 is substantially T-shaped in elevation. The cross 3.1 of the T covers the battery compartment 4 and the leg 3.2 of the T covers the SIMM card compartment 7. In this manner, the surface of the combination cover 3 is not larger than strictly necessary.

The telephone 11 in the Figs. 3 and 4 shows great similarity to the telephone 1 of the Figs. 1 and 2. The telephone comprises an antenna 19 and again a housing 12, a battery compartment 14 closable by a cover 13, for accommodating a battery (not shown) connected to the battery contacts 16 of the telephone and further comprises a SIMM card compartment 17 also closable by a cover 13, for accommodating a SIMM card 18. The cover of the battery compartment 14 and the cover of the SIMM card compartment 17 are combined to a single combination cover 13. The battery (not shown in this case) may again be attached to the combination cover 13. When the combination cover 13 with the battery (not shown) attached is removed from the housing 12 of the telephone 11, the contact of the battery (not shown) with the available battery contacts 16 of the telephone is broken.

Also in this embodiment, the combination cover 13 is substantially T-shaped in elevation, the cross 13.1 of the T covering the battery compartment 14 and the leg 13.2 covering the SIMM card compartment 17.

The difference between the two embodiments shown in Figs. 1 and 2, and 3 and 4, respectively, mainly relates to the location of the combination cover 3, 13 respectively, on the telephone 1, 11 respectively. In the embodiment shown in Figs. 1 and 2, the combination cover 3 is located at a distance from the sides of the housing of the telephone 1, the combination cover 3 having a substantially flat form. With the telephone 11 shown in Figs. 3 and 4, the combination cover is located near to the edge of the housing 12 of the telephone, so that the cover 13 comprises not only a substantially flat T-shaped portion 13.1-13.2, but also raised edges 13.3-13.5.

Although the invention has been discussed with reference to two different embodiments, it should be recognized that the invention relates to any variant that is possible within the scope of the appended claims. For example, it is not necessary for the combination cover to be T-shaped. Furthermore, it is not necessary to attach the battery to the combination cover.

LIST OF REFERENCE NUMBERS

1	-	telephone
2	-	housing
3	-	cover (combination cover)
4	-	battery compartment
5	-	battery
6	-	battery contacts
7	-	SIMM card compartment
8	-	SIMM card
9	-	antenna
10	-	
11	-	telephone
12	-	housing
13	-	combination cover
14	-	battery compartment
15	-	
16	-	battery contacts
17	-	SIMM card compartment
18	-	SIMM card
19	-	antenna

Claims:

1. A mobile telephone (1; 11) with a housing (2;12) that includes a battery compartment (4;14) closable by a cover (3;13) for accommodating a battery (5) connected to battery contacts)6;16) of the telephone and further includes a SIMM card compartment (7;17) closable by a cover (3;13) for accommodating a SIMM card (8;18), characterized in that the cover of the battery compartment (4;14) and the cover of the SIMM card compartment (7;17) are combined to a single combination cover (3;13).

2. A mobile telephone 1 as claimed in claim 1, characterized in that the battery (5) can be attached to the combination cover (3;13) and in that the contact of the battery with the battery contacts (6;16) of the telephone is broken when the combination cover (3;13) with the battery attached is removed from the housing (2;12) of the telephone (1;11).

3. A mobile telephone 1 as claimed in claim 1, characterized in that the combination cover (3;13) is substantially T-shaped in elevation, the cross (3.1;13.1) of the T covering the battery compartment (4;14) and the leg (3.2;13.2) of the T covering the SIMM card compartment (7;17).

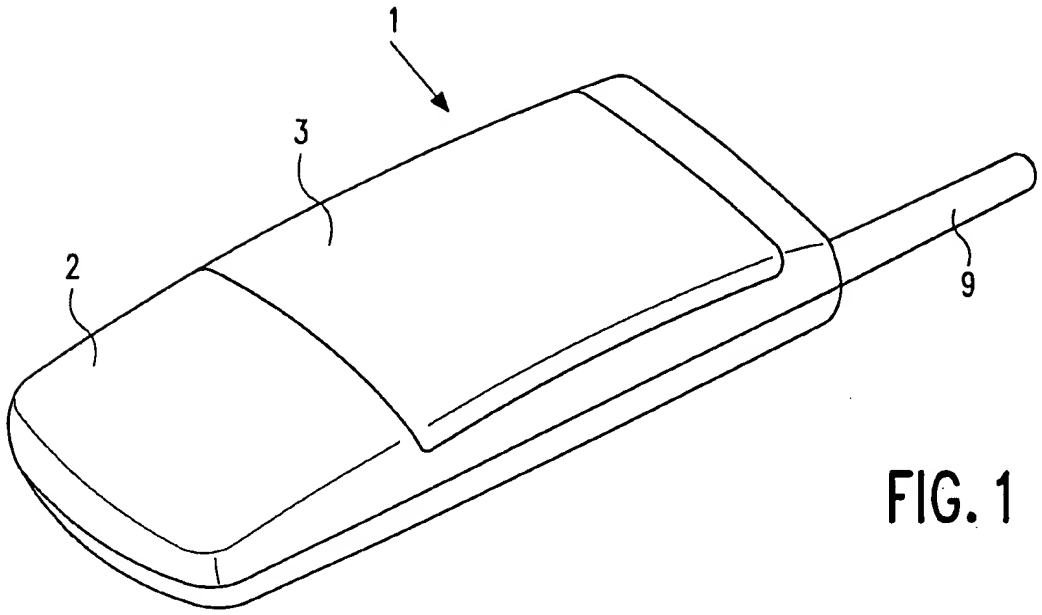

FIG. 1

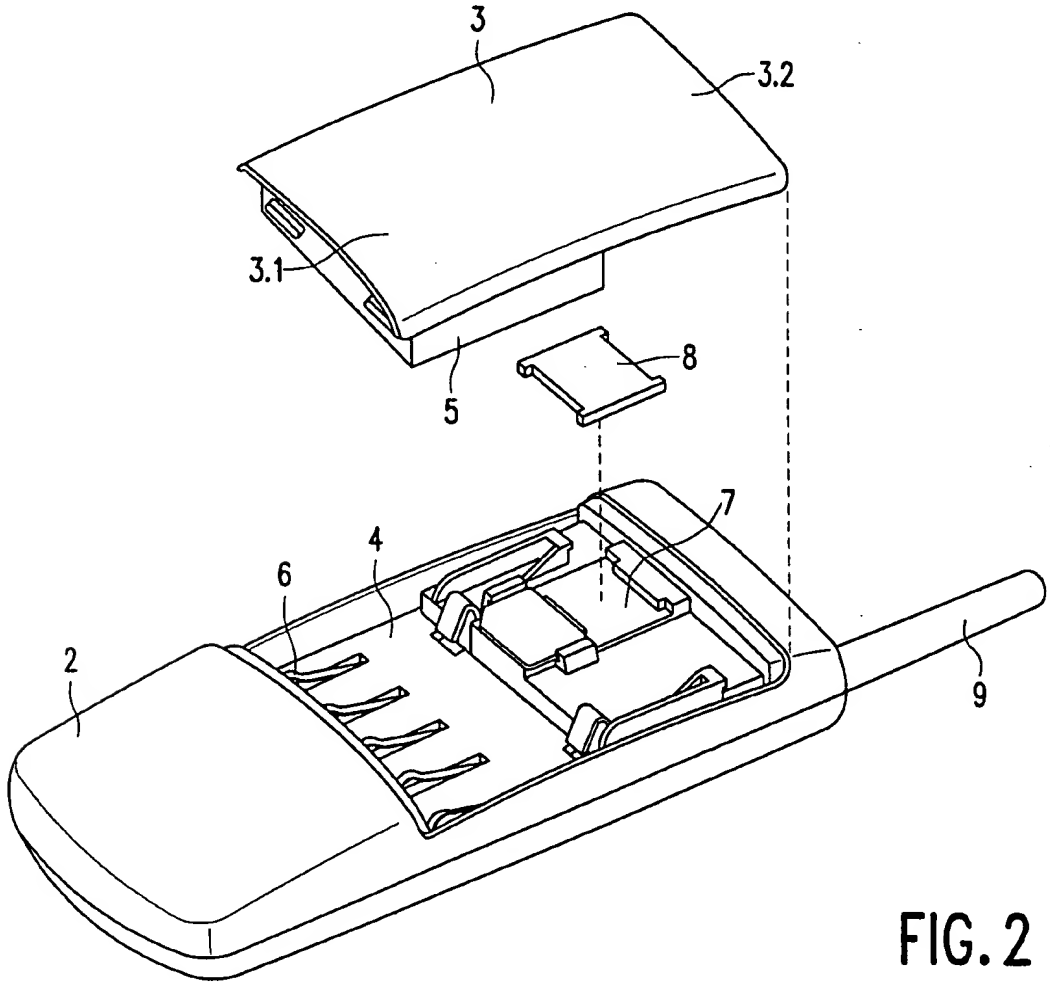

FIG. 2

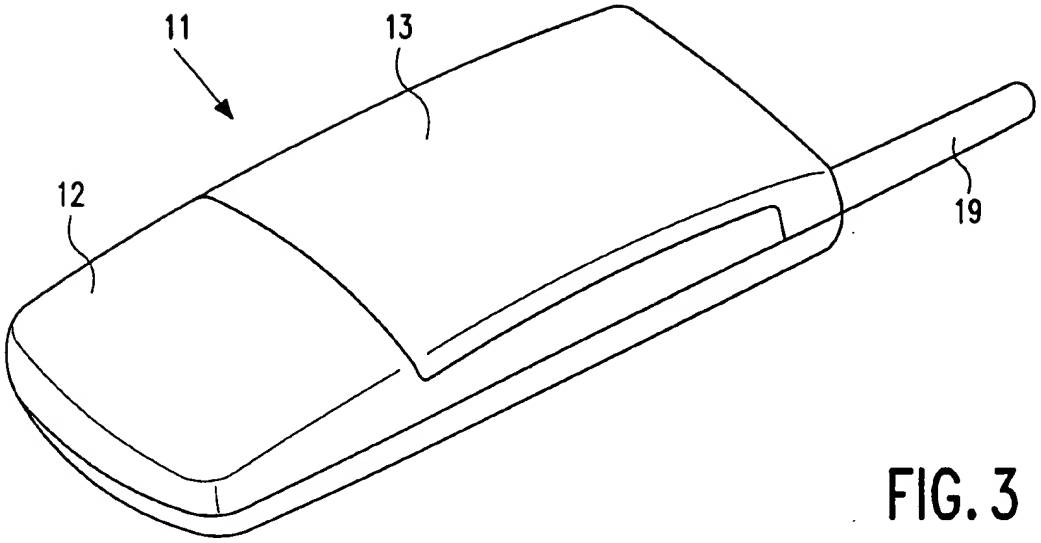

FIG. 3

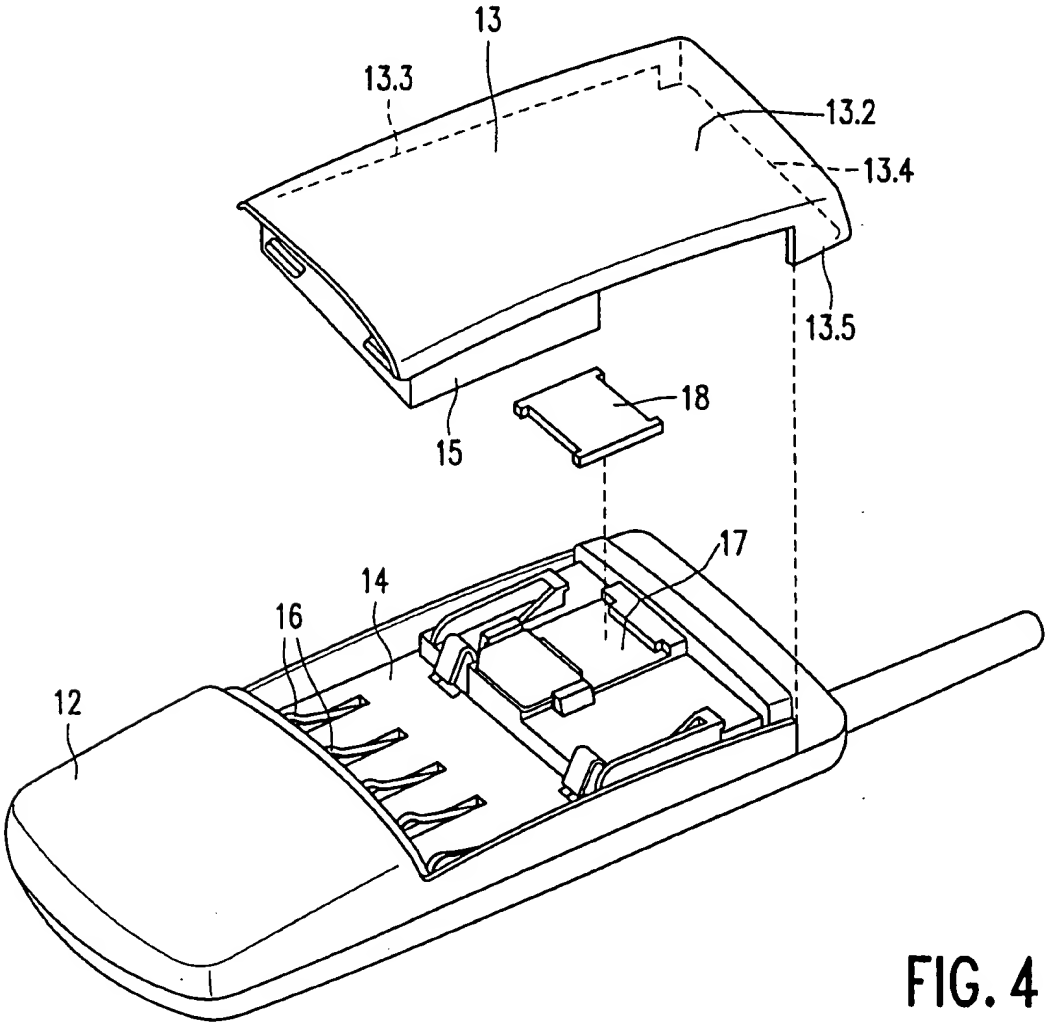

FIG. 4